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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,059	12/18/2001	John C. Eidson	10010255	8596

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EXAMINER

PHAN, THANH S

ART UNIT	PAPER NUMBER
2841	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/026,059

Applicant(s)

EIDSON ET AL.

Examiner

Thanh S. Phan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 4, 6, 12-15, 17, 18 and 20-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 4, 6, 12-15, 17, 18, 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, 12, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al. [US 4,008,564].

Regarding claims 1, 3, 4, 12, 13, Luce et al. disclose an electronic watch system [figures 1-5] comprising electronic component [34] having an enclosure/can [40] that protects the electronic component; structure that surrounds the enclosure and that increase a thermal mass of the electronic component [potting/ceramic material; column 4, lines 53-56].

Luce et al. disclose the claimed invention except for saying that the structure reduce thermal drift/increase thermal mass.

It would have been obvious for the structure disclosed by Luce et al. to reduce thermal drift/increase thermal mass since a larger area for heat dissipation are provided. Further, reduced thermal drift will occur whenever thermal mass increased.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al. in view of Khan et al. [US 2002/0185720].

Regarding claims 5 and 6, Luce et al. disclose the claimed invention except for the structure being encased within an insulative material.

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Khan et al. disclose a circuit element [102] including a heat spreader [502] incased in an epoxy material [116].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the encasing design of Khan et al. with Luce et al. for the purpose of providing mechanical and environmental protection.

Claims 14, 15, 17,18 and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Luce et al., as disclosed in preceding claims, in view of Kirkpatrick [US 2002/0186618].

Regarding claims 14, 17, 18 and 20, Luce et al.; alone and/or modified as disclosed above; disclosed the instant claimed invention except for the clock circuit including means for communication via a network and means for synchronizing a local time value in a clock circuit in response to a set of messages transferred via by means of the network.

Kirkpatrick discloses a method of synchronizing a plurality of clock nodes [102, 104 and 106] via a network [figure 1].

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the net work synchronizing design of Kirkpatrick with the clock of Luce et al.; alone and/or modified; for the purpose of providing accurate time to each node.

Regarding claim 15, Luce et al., as modified, disclose the use of a crystal component [32].

### ***Response to Arguments***

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Applicant's arguments filed 11/18/04 have been fully considered but they are not persuasive.

Applicant's first argument is on page 7 of the response and states that the rejections are improper because Luce does not teach that the potting material reduces thermal drift by increasing the thermal mass of the device. This argument is not persuasive. Luce does not explicitly stated that "reduces thermal drift by increasing the thermal mass of the device", but because the potting material is in thermal contact with the device it will necessarily increase the thermal mass. One of ordinary skill in the art would have recognized this. Once the mass is increased the drift will be reduced because there is more mass to take up the temperature variations. Applicant's second argument on page 7, regarding the structure that surrounds the enclosure of the device is now moot in view of new ground of rejection. Applicant's arguments from the last paragraph of page 7 to the top paragraph of page 8 are not persuasive. Regarding the potting material of Luce does not affect the thermal properties of the device is not true. The material is in thermal contact. Therefore, the mass increase and the thermal drift decrease. Regarding the insulator 42 of Luce, an insulator for electronic doesn't mean thermally insulated. This layer is thermally conductive, even if the thermal conductive is poor, there is still some degree of conductivity, which means some increase in thermal mass of the device, and applicant does not claim how much the increase is. Applicant acknowledge on page 9 that the limitations of claim 15 is similar to the limitations of claim 1, therefore it is rejected for the above reasons.

### ***Conclusion***

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tsp



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